

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claim 1 (previously presented): A component of a radiation detector comprising:
a substrate;

a photoelectric element arranged on a portion on an upper surface of the substrate and having a first pad on a light receiving surface, the photoelectric element generating an electrical signal based on an intensity of received light;

a pad formation section arranged on a portion on the upper surface of the substrate and different from the portion on which the photoelectric element is arranged; and

a second pad formed on the pad formation section, arranged to form a same plane as a plane of the first pad arranged on the light receiving surface of the photoelectric element, and electrically connected to the first pad.

Claim 2 (previously presented): The component according to claim 1, wherein the first pad is electrically connected to the second pad by a bonding wire.

Claim 3 (previously presented): The component according to claim 1, further comprising:

a third pad arranged on a rear surface of the substrate; and

a three-dimensional wiring electrically connecting the second pad to the third pad.

Claim 4 (previously presented): The component according to claim 1, wherein the substrate is an MIS substrate; and
the three-dimensional wiring is formed by the MID substrate.

Claim 5 (previously presented): The component according to claim 1, wherein the three-dimensional wiring includes a through hole formed to penetrate the substrate.

Claim 6 (previously presented): The component according to claim 1, wherein the substrate and the pad formation section are formed integrally with each other.

Claim 7 (previously presented): A component of a radiation detector comprising:
an MID substrate and a photodiode array provided to contact with the MID substrate;
a pad formation protrusion provided on an upper surface of the MID substrate on a side contacting with a lower surface of the photodiode array, an upper end face of the pad formation protrusion being equal in height to an upper surface of the photodiode array;

first pads provided on upper surfaces of photodiodes of the photodiode array, respectively in a section adjacent the pad formation protrusion;

second pads provided on the upper end face of the pad formation protrusion in a section adjacent the first pad;

a bonding wire provided between one of the first pads and corresponding one of the second pads;

a wiring pattern provided on the upper surface of the MID substrate contacting with the photodiode array;

first terminals as many as the second pads and one second terminal provided on a lower surface of the MID substrate, wherein

the second pads and the first terminals are electrically connected to one another in a one-to-one correspondence; and the wiring pattern is electrically connected to the second terminal.

Claims 8-29 (cancelled)

Claim 30 (new): The component according to claim 7, wherein

a positioning groove or a positioning protrusion which positions the photodiode array is provided on the upper surface of the MID substrate.

Preliminary Amendment
10/600,595

AMENDMENTS TO THE DRAWINGS

Please replace the eighth sheet showing Figs 9 and 10 with the attached sheet:

Attachment: Annotated Marked-Up Drawing(s)
Replacement Sheet(s)